ARISTOTLE'S PHYSICS X -- PROCESS

Marc Edmund Jones

This lesson is a consideration of the Physics, Book III, chapters 6-8, and of Aristotle's thesis that the unlimited is an intellectual process in measuring, identifying and understanding poten-He points out that time and space are indeed unlimited, but tiality. that their successive stretches do not coexist and that in consequence the unlimited is not something definable of itself, but is only the mode of definition for the possibility of stretch in a particular kind The mergence of time and space is a scientific phenomeof measure. non when these factors are taken as measurement, or when the interrelation of position and movement at the base of both measures is taken into account. Thus distance in space lengthens the relation in time. A man may go from home to business or vice versa daily, a stretch in space wholly in the now, but to visit his family at the summer resort requires the traversing of a greater stretch in space and so requires more time and has to be postponed to a weekend. However, it is perfectly ridiculous to deduce from this coincidence of these measures in experience that their unlimited potentiality has anything in common to the extent that the unlimited itself becomes something apart from that of which it is an attribute. In occultism the elaborate charting of evolution in terms of chains and globes, rounds and epochs, is a blending together of remote time and space factors, but the placing in space on the one hand, and in time on the other is a stretching-out process which merely exhibits the lengthening potentials of the elements that make up human nature.

The development of Greek thinking as particularly sharpened by Aristotle's contribution is here the realization that the unlimited is actually the exact opposite of its usual description since, as Aristotle points out, "it is not that beyond which there is nothing, but that of which there is always more beyond." Infinity, therefore, is not properly visualized as the boundary within which everything can be captured and reduced to a satisfaction of mind, but rather as the nature of existence by which, through its extension in space and its projection in time, it can be taken as far as ever necessary to uncover its potentialities. Infinity is a means for recognizing everything as whole in its own right, because everything essential to every particular need is to be found through the inherent unlimited relations of everything to everything else. A man as so much weight on an elevator, which because of its load snaps its cable and drops, has little extension in either time or space. His pertinence to the situation is not much more than a few sacks of grain. But the man who perfects an elevator and makes it possible for many more men to function on a given area of ground, has an extension in space and time

that is by contrast well nigh immeasurable. The possibility of a tall building saves time in civilized complex because the spatial relationship of workers is given an added dimension, but this would not be possible if the potentialities of this spatial relation had not been experienced in a stretch of time back into the past. being accomplished is a definite bringing of the more-beyond closer at It is the process well illustrated in the assembly line on which all modern mass production is based. A moving belt or its equivalent subtracts the factor of time and space almost infinitely, enabling the worker to operate under no limitation but that of his own capacity to repeat the operations which constitute his part in the particular scheme of things. Infinity is not man's loss of his being in the unlimited regression of relations away from it, but is the self-gathering or creative power by which any individual brings the whole world together with all its past history and future opportunity directly upon his own doorstep.

The contribution to intellectual power at this point is Aristotle's expression of this self-gathering capacity in terms of the Wholeness is the practical manifestation of infinity. totle here makes a careful distinction between the whole in the sense of a limitation and in the proper sense of completeness. As limitation it is the boundary by which reality is constricted. what is achieved by improperly grounded thinkers, a labored effort to Without realizing it they seek an assurance for define the universe. the completeness of their knowing by the exclusion of all alien possi-The untutored mind gets satisfaction in the pseudo-realibilities. zation that nothing different from itself has any real existence. there are other people, they are inferiors or of no consequence. Other ages and epochs either had no existence, or they fell short of Any future new world will simply be a more perfect limitathe mark. tion of possibilities along the lines of present experience. is never the attainment of new potentialities but only the sure fulfillment of present ones. The real doctrine of the whole is not this attempt to assure the self that it has no need for extending itself in any unlimited direction but instead is the revelation of unlimited possibilities for self-extension.

The guide to effective thinking at this stage in the study is found in the realization that extension and expansion are not a cancellation of reality but are rather a further application of its possibilities. The man who ranks as little more than the sacks will differ in no eternal degree from the other individual who perfected the elevator and builds a civilization since both of them have a reality centered in their own experience. Both are whole. Their differences are the degrees of extension possible to each without the sense of threat to a functioning wholeness. Aristotle shows the characteristic of the unlimited to be its capacity for division. Like the self-filling pitcher the more that is poured out of self, or

the more that self is divided by its ramification in experience, the more it has confidence in itself and knows itself for what it is.

The usefulness of Aristotle's approach in terms of the Sabian point of view is its emphasis of the fact that the reality of the whole is experienced at center, and not in any way at the periphery of its extension. Man forgets that the end or purpose in anything is not the reality but only the delimitation of reality. it comes to a distinction between means and end, the end is that which makes the means intelligible and the intelligibility itself is the ac-Thus outstanding individuals labor to make the world a tual goal. better place, and the reason is that life will be enriched if the goal is accomplished. The enrichment of life, however, gains its meaning from the contrast with its lack, so that the achievement is selfdefeating in terms of the goal itself. Men in heaven would be no better off than Adam and Eve in the garden if their earth experience did not give them appreciation for whatever they possessed in the af-The real end in the improvement of society is the enrichment of life that comes from the quest for enrichment.

SUGGESTIONS FOR REVIEW AND APPLICATION

- (1) How is the unlimited here explained? In what way is it the exact opposite of the usual interpretation of the term?
- (2) What are the function and nature of creativeness, and how does it operate?
- (3) What is the real doctrine of the whole?
- (4) Why is capacity for division a characteristic of the unlimited? Where is the reality of the whole experienced? What is the real end in the improvement of society?

IN YOUR OWN WORDS, IN THE LIGHT OF THIS LESSON, STATE ARISTOTLE'S CONTRIBUTION IN TERMS OF THE SABIAN POINT OF VIEW.

ARISTOTLE'S PHYSICS XI -- PLACE

Marc Edmund Jones

This lesson is a consideration of the Physics, Book IV, chapters 1-5, and of Aristotle's thesis that the place of anything is not something that has a metaphysical existence on its own account but is merely the relating of the subject of interest or inquiry to a par-The argument here is an extension of his ticular frame of reference. discussion on the subject of infinity, or the unlimited. stract existence of a value is impossible to this point of view, and this principle applies as well to space as to time, or to the tendency to accept what might be termed a local absolute in the form of a real The where is as ephemeral, as such a focus in experience, as the when. Anything is absolute only in the generalized conception of some wholeness in particular, and it has to remain an abstraction dependent upon the experience from which it is abstracted. The paradoxes of Zeno, in Aristotle's age, together with many verbal and idle speculations not only of that time but of the present, have concerned themselves with the question of undifferentiated space. This has been conceived to be the great reservoir out of which all creation has However, in such a sense, space is no more than another form of the primary water, air and idea bases which have been suggested in a similarly ineffective attempt to identify a one from which the many Modern science has sinned outrageously in this remav be derived. gard through its altogether too common assumption of a great infinitely regressive space as the mother-matrix for all existence.

The development of Greek thinking as particularly sharpened by Aristotle's contribution is here his consistent denial that any sort of abstract space can exist. Anything that has being has its place but this place cannot be erected into an absolute, an abstracted entity of any sort, without dividing reality and leading the thinker into the green pastures fallacy, i.e., the infinite regression again. The fallacious thinking here is represented among occultists in the notion that man has an ideal form which the physical reality fills out In this sense the metaphysical place of anything is or consummates. in its archetype and the idea becomes an absolute. However, the problem is much more a part of everyday life. How can anything be Experience has no difficulty moved from one position to another? with this, because experience just moves it. From a philosophical point of view the object is contained in a scheme of reality and its movement must be in the terms of that scheme and its economy of af-The problem which the thinker faces is primarily encountered in connection with the idea of free will. If the circumstances of an object's position have anything to do with its place, then how can the location be changed without a complete disruption of the orderliness

in which it is found? Aristotle settles the difficulty here by showing place to be not an actuality in itself but relationship in connection with a point of reference. This point of reference parallels the pattern of energies in which the object's location is a part and its movement in space, like its relationship to the whole process of being, is simply a fulfillment of its own nature.

The contribution to intellectual power at this point is the realization that the philosophical difficulties in their own terms have no great meaning to the modern thinker, although they were of vast importance to the metaphysically inclined Greek. This was because his world was largely ordered by an extrinsic set of necessities, and there was only a minimum of room in the way of thinking for The difficulty in modern times is anything spontaneous in nature. most in evidence among the philosophers who approach the world out of a behavioristic psychology. Man to these thinkers is an organism which comes into being and reaches its maturity through a continuous interaction with its environment. There is a tendency in this school of thought to lift the environment as such into a matrix which is narrowly close to being an entity, and any idea that the man on the one hand and his environmental complex on the other can be separated is They admit that the complex of the man's simply foolishness to them. experiences creates this environmental complex, in cooperation of course with the elements in the environment, but they cannot see how the man can exist in separation from it. Environment or culture is to them what the soul of a man is to the transcendental idealists, who see no chance for man to act apart from his invisible compulsion as expressed in his karma and the like. What Aristotle would point out is that the environmental complex on the one hand, and the soul on the other, are simply a measure, a portrait or a statement of the condition of the individual, and that he may move his place in the terms of that frame of reference or any other despite the fact that any such movement takes place of necessity in some frame of reference. organism is what it is, and it is able to survive because of its power of adjustment to these frames of reference, not because of its supposed bondage to any of them.

The guide to effective living at this stage in the study is found in the simple realization that the where of anything is simply its description according to a frame of reference through which the inquiry is intelligent or useful. The proper place of anything is that which describes it exclusively, and the common place of it is that which it shares with other things. Thus the proper place of the wine is in the bottle, and its common place is in the cupboard where there are many bottles and other things. The proper place of anything is that which immediately encompasses it and narrows the realization of its function whereas its common place gives it a location in a broader frame of reference and suggests further ramification in understanding its function or usefulness. Improperly used, however,

this form of inquiry leads to nesting ideas, or feels assured to the degree that things are found in other things. Probably reverting back to interuterine experience, man seems to feel comfortable as he is adequately contained, and he wants all his experience in place in such a sense. Because the point of view becomes infinitely regressive, it is objectionable. The idea of containment is merely one way of expressing a useful relation, but the containing factors are never metaphysical realities. Space and place are generalizations out of experience and not superior existences to which things must be referred in order to partake of reality.

The usefulness of Aristotle's approach in terms of the Sabian point of view is his careful classification of the modes of description. Ordinary life reveals the kind of change evident in alteration of size or content, on the one hand, and of quality or value-content, on the other. Also, of course, there is the evolution or coming into being, and the growth or fulfillment of things. In looking out to the great encompassing world, Aristotle finds it useful only in providing a larger frame of reference and so he only looks into the types of motion which measure or indicate a common place of things in general. To him the heavens disclose reality, but they are not its place of origin.

SUGGESTIONS FOR REVIEW AND APPLICATION

- (1) How do Aristotle and modern science differ in their understanding of place?
- (2) How can anything be moved from one place to another? How does this process resolve any apparent conflict between place and free will?
- (3) What is meant by being in a proper place? Where is anything?
- (4) How may this idea of place be of use to me?

IN YOUR OWN WORDS, IN THE LIGHT OF THIS LESSON, STATE ARISTOTLE'S CONTRIBUTION IN TERMS OF THE SABIAN POINT OF VIEW.

ARISTOTLE'S PHYSICS XII -- MEDIATION

Marc Edmund Jones

This lesson is a consideration of the Physics, Book IV, chapters 6-8, and of Aristotle's thesis that movement is not controlled by whatever may permit it, but by the positive situation of which it is an expression. In other words, he is attacking the rather common theory of his day that bodies require a void in which to The Greeks were very inclined to think of everything in terms of atoms, or aggregates of atoms, and to take the material nature of these atoms very seriously. In these terms, no two bodies can occupy the same space, and therefore it either is necessary for something to get out if something else is to get in, or else for an empty place to This required the conception of emptiness as almost a be available. positive fact in nature and led to the various theories of the void. Aristotle's quarrel, as always, is with the tendency to make an entity, a basic principle or a self-sustaining and eternal reality out of things of this sort. The great void was the beginning of all things in much ancient thinking because it seemed to be necessary in order to supply both the interstitial fragments of void here and there amid bodies as well as the great mother-matrix of the universe. However, the amount of power and importance given to this void amounted to placing the fundamental dynamic of existence in a vacancy. how far the ancient theorists might go in identifying the intervention of a positive factor in this void, such as the spirit of God, or the reawakening of a quiescent spirit in Brahma's emergence from the period of great cosmic sleep, the void was the one great reality, and the intervening element subsidiary in every practical sense.

The development of Greek thinking as particularly sharpened by Aristotle's contribution is here another emphasis upon the positive manifestation of reality as the proper dynamic in all thinking. atomistic theorizing had its value in accounting for differences, since all qualities in things could ultimately be attributed to something in the atomistic makeup, and thus far it was constructive in providing a basis for classification. But this notion has persisted in an overliteral form, and has been a commonplace in modern science where the molecular patterns are held responsible for the characteristics of physical substances. Fortunately, in modern times, this conception of the makeup in substances has been restricted to physical elements which by definition are manifestations of energy characterized by fundamental consistencies of action and reaction. theories have avoided the rigidity of much Greek thinking because the structural characters of molecular substance are subject to change and modification and are only real as typical manifestations of force-Little attempt is made to set up any absolute entities in

electrons or protons. Aristotle is not so much attempting to show the inadequacy of the hypotheses offered by the Greek physicists as to demonstrate the fact that it is unnecessary to set up any deus ex machina in order to account for nature. Also, such effort only erects insuperable barriers against any understanding of nature.

The contribution to intellectual power at this point is the emphasis again upon the fact that the great dynamic in any existent is More than anything else, an object which has existits own nature. ence will seek to maintain that existence. The first necessity of being is to continue in being or, more importantly, to attempt to perpetuate a characteristic act-of-being by which whatever it is contin-Aristotle himself is somewhat primitive in ues to remain what it is. his descriptions of these characteristics because he has no access to the vast body of facts piled up by modern scientific investigation, but it is possible that even Aristotle himself knew he was speaking somewhat symbolically, or with an everyday overview, when he said it was of the nature of fire to go up and of earth to go down. mal can best be stimulated to action by threatening to stop the continuance of its animal nature. The dogs and elephants and great cats in the circus are trained by the use of hunger and the rewarding of the performer with something to eat. Man on his level will fight for more subjective things when they are sufficiently necessary to him in his own personal reality. This is the basis of morals, or the willingness of people to die if necessary rather than submit to participation in an experience they cannot countenance to themselves. cases the act refused may be so simple a matter as putting a pinch of incense on the brazier in front of the emperor's statue, the case with the Christian martyrs, but these people knew that their fundamental nature would be altered if they deviated in this one small respect from the ideal set up, however artificial it might be, and death was much more attractive than life under such circumstances.

The quide to effective living at this stage in the study is found in the fact that things not only act according to their nature but are convenient to other things because of their nature. the mediums through which motion takes place vary in their resistance offered, as noted in the case with which a body can be moved through Effective living is primarily a air as in comparison with water. matter of making the life a medium for desired social movement or development and so contributing to a personal participation in experience of larger and greater worth. But the man who resists the infectious spread of new ideas for human welfare is unconsciously counted out of the reckoning by his fellows, so long as he continues recalcitrant, and thus the new ideas have increasingly expansive power. is what he is, and this is not only the condition of his own continuousness but also a condition of the tolerance his situation will have Movement is not the flow of something into a void, but is for him. the response of like to like, of natural inclination to its own.

organism or a situation respond to the potentialities of manifestation and are natural in this sense.

The usefulness of Aristotle's approach in terms of the Sabian point of view is in the type of argument he uses to show the non-necessity of any concept of a void. For this to exist, it would have to be self-sustaining, but there cannot be any self-existence in the void, or in anything else for that matter, if there is no evidence of a self or of a basic dynamic-centering in its existence. is purely receptive, granting that it could exist, and this gives it no nature and no reason for being. The concept thus ends up in an almost meaningless combination of words. Anything to be must do something, and the only doing that can be attributed to the void is permitting the flow of tangible objects into it. The notion in this case is meaningless because the vacated place of the moving object under this theory is simply some more of the void, and to move from nothingness to nothingness is an act without possibility of description, thus betraying the fact that what the void does is purely verbal What this all means is that nothing exists in the experience of the self except as it manifests something the self can experience in some sort of definite self-realization. Neither the existence nor the welfare of the self is ever at any time threatened by an abstraction.

SUGGESTIONS FOR REVIEW AND APPLICATION

- (1) By what is movement controlled? What light does this throw on atomistic theorizing?
- (2) What is the proper dynamic in all thinking? In all existence?
- (3) What is the evidence of effective living?
- (4) Why can there be no real concept of the void?

IN YOUR OWN WORDS, IN THE LIGHT OF THIS LESSON, STATE ARISTOTLES CONTRIBUTION IN TERMS OF THE SABIAN POINT OF VIEW.

ARISTOTLE'S PHYSICS XIII -- TIME

Marc Edmund Jones

This lesson is a consideration of the Physics, Book IV, chapters 9-11, and of Aristotle's thesis that change does not require the aid of any agency exterior to the object undergoing transformation or participating in movement. There obviously is cooperation through every relevant detail of the concrete whole in place, but to account for this through an intervening reality, which itself is no part of the complex, simply contributes to a confusion in thinking. ficulty may be resolved in this manner, but others are promptly creat-Thus, Aristotle refers to the assumption of interstitial fragments of the void as an explanation of both lightness and soft tex-If both of these qualities are due to the presence of more void in the given body, then they ought always to go together, but in actual fact iron is lighter than lead but lead is softer than iron. This is an example of the inconsistencies of human rationalization whenever the primary appeal is something outside a situation to explain action taking place within it. When an internal agency cooperates with an outer, and the point of view is concerned with the outer agency, the internal activity can be dismissed as far as its own terms are concerned, because it is acting for its own necessity in its own economy. The same thing is true in the reverse point of view. Hence the presence of a dog in a room at the time of a certain event has meaning in terms of the concrete whole situation. It is not necessary to explain anything about the dog, other than that the dog is acting according to its own nature. If the consideration is of the dog's psychology, however, the situation in the room is then dismissed as what it is according to its nature as a constant larger whole for the analysis of the dog.

The development of Greek thinking, as particularly sharpened by Aristotle's contribution, is here his reiterated emphasis on movement or motion as the proper fundamental factor in the considera-Movement reveals space because it shows how tion of anything at all. various objects alter their relationships among themselves in a spa-At the same time, movement also reveals time because its stages and sequence show how definitely this or that interval has: The movement does not have to be a literal passed over an event. moving about, since it can be a mental experience. It can be change taking place in darkness or under conditions where one or more of the senses are subtracted from the scene. There is consciousness of nei-Consciousness in space is the ther space nor time without movement. phenomenon of attention, or subjective alteration in the focus of Consciousness in time is the sense of transition, so that time under some circumstances will seem to fly, and under others to

for him. Movement is not the flow of something into a void, but is the response of like to like, of natural inclination to its own. An

drag mightily. Space itself is never the basis of observation, but only distance or relation in position as evident to attention. Similarly there is no experience of pure time for the same reason. They measure consciousness, but consciousness is the fundamental necessity in experience which at base is the movement of self in strict relationship to itself. In every way doing is the basis of being, so that man continues to exist through movement. Space and time are known to him through what they do rather than through what they are.

The contribution to intellectual power at this point is through Aristotle's importantly emphasized continuousness of magnitude or space on the one hand, and of time on the other. Questions as to what space and time are become unintelligent because these factors of judgment or measurement exist in their active revelation of movement rather than of any static state. Space is eternally reordered by whatever frame of reference may be taken in the external world, so that any effort to center it abstractly or absolutely, away from the convenience of this frame of reference, is futile. Change of refer-This is illustrated ence changes space, to all intents and purposes. simply in the distance of a lover next to a loved one on the couch in a frigid mood; and the nearness of the same individual when, hundreds of miles away, he sends a letter breathing warm love to the same object of his affections. The argument, that a measure of space is fixed in units of feet or miles, carries no weight because it is not the measure of the distance but the meaning of the measure that The telephone annihilates the blocks of a city in a perfectly literal fashion, and it is playing with words to affirm different-The question of time is even more simple because every mind creates the focus of time for itself in its own experience, and any attempt to make it otherwise leads to such silly questions as that of the lady who wanted to know how the people who lived in B.C. dates knew what the year was.

The guide to effective living at this stage in the study is found in the contemplation of Aristotle's truly remarkable achievement or his quite modern insight into the reciprocal relations of time and He does not carry his conclusions very far, it is true, but he very definitely recognizes the fact that time adds a definite dimension to the three of spatial experience, or that time is the nonspatial dimension of movement. The import can be made clear by contemplating a hypothetical two-dimensional world in which movement would be confined to a flat surface without conception of depth. Nothing would be more magical in this world than for something to be lifted up in a third dimension and replaced at a desired point in the two-dimensional complex. In terms of two-dimension experience, the event could only be described as the disappearance and reappearance of Actually what had happened was that a limitation, recognized in a given frame of reference, had been cancelled out by changing the reference to a frame with the expanded dimensional function.

The proposition is equally true in the three-dimensional world, because the man at the corner of Avenue A and First Street, who should be at the corner of C and Seventh, needs only time to rectify the situation. By walking the nine blocks he resolves the situation without difficulty.

The usefulness of Aristotle's approach in terms of the Sabian point of view is this emphasis of the manner in which time and space may be employed usefully, each for the solution of a difficulty centered in the terms of the other. Lewis Carroll in his fantasy of Alice's adventures gives the picture of this in reverse when Alice tries to play croquet with a flamingo for a mallet, a hedgehog for a ball and soldiers bending over for the wickets. She was never able in time to get her factors arranged according to the necessity in space. When she had the flamingo straightened out for use as a mallet to hit the ball, the ball had uncoiled and walked away, and when she got both of these in order the wicket had gotten tired and moved. What is here seen humorously in the undoing of a situation is equally true seriously in the resolving of its difficulties.

SUGGESTIONS FOR REVIEW AND APPLICATION

- (1) When change takes place what are the cooperative factors?
- (2) Why can there be no consciousness of time or space without movement?
- (3) What is the advantage to you of knowing that space is eternally reordered and time individually recreated?
- (4) How may an understanding of the reciprocal relationship of time and space be of advantage to you?

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